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ACQUISITION AND
TECHNOLOGY

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MEMORANDUM FOR ASSISTANT SECRETARY OF THE NAVY (RESEARCH, DEVELOPMENT AND ACQUISITION)
ASSISTANT SECRETARY OF THE AIR FORCE (ACQUISITION)

Subject: Increasing Science and Technology Investments in Hearing Protection and Reduced Emission Engine Technology

Current hearing-protection equipment is not adequate to protect DoD personnel from high-decibel noise produced by jet engines. The Joint Strike Fighter Overarching Integrated Product Team (JSF OIPT) discussed this deficiency at its March 10 and June 1, 2000, meetings.

Deputy Under Secretary of Defense, Science and Technology held a two-day workshop on hearing loss caused by personnel exposure to tactical aircraft engine noise. The workshop participants recommend that $11.5 million in basic research be invested to develop improved hearing protection equipment. The JSF OIPT endorsed this recommendation and noted that DoD annually spends $300 million for hearing-loss compensation. I request that you make investing in hearing protection a top priority in your science and technology programs and that, working with DUSD(S&T), you make hearing protection a Defense Technology Objective.

The JSF OIPT also discussed the difficulties the Services will face in connection with their plans to deploy the JSF at seven bases located in Clean Air Act non-attainment zones. The high-performance JSF engines will have a level of nitrogen oxide emissions above that of aircraft it will replace. Consequently, the Services will have to negotiate with state and local regulators to receive permission to base the aircraft in non-attainment areas, or base the aircraft at other locations.

There are technologies that may lower emission levels; however, they are not sufficiently advanced for the JSF to use initially. I am asking the ODUSD(S&T) to chair a Working-level Integrated Product Team with representation from the Services, NASA, the JSF Program Office, Office of the Director, Strategic and Tactical Systems, Office of the Deputy Under Secretary of Defense for Environmental Security, and industry to develop an S&T plan to develop and demonstrate engine emission-reduction technology through the Integrated High Performance Turbine Engine Technologies (IHPTET) and post-IHPTET programs. I would like, by September 15, 2000, a report outlining a joint government-industry technology plan with estimated funding and schedule impact on the IHPTET and post-IHPTET programs with these additional emission-reduction

technologies included. I also request that you work with the DUSD(S&T) to incorporate engine emission-reduction into future propulsion Defense Technology Objectives.

The Department must invest in technology that will allow us to base our aircraft according to operational needs and to deploy our aircraft without restrictions. Our investments must also produce weapon systems that do not harm our people who support them. I urge you to examine all of your weapon system programs closely to determine how we can better protect our people and ensure the environmental performance of the weapon system does not become an impediment to basing, operating, or deploying it. Failure to do so will only increase costs in the future and may inhibit the Department's ability to field the systems it develops.

J. S. Gansler